LineUp With Math™ Alignment
Texas Essential Knowledge and Skills (TEKS) for Mathematics
§111.23 Mathematics, Grade 7

b. Knowledge and Skills

(2) Number, operation, and quantitative reasoning. The student adds, subtracts, multiplies, or divides to solve problems and justify solutions. The student is expected to:

Knowledge and Skills and Performance Descriptions	***LineUp With Math™* Activities**
(D) use division to find unit rates and ratios in proportional relationships such as speed, density, price, recipes, and student-teacher ratio;	--Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios. --Use an interactive simulator plus calculation worksheets to apply proportional reasoning to identify and resolve distance, rate, time conflicts in air traffic control.

(3) Patterns, relationships, and algebraic thinking. The student solves problems involving proportional relationships. The student is expected to:

Knowledge and Skills and Performance Descriptions	***LineUp With Math™* Activities**
(A) estimate and find solutions to application problems involving percent;	--Use percent relationships to resolve distance, rate, time conflicts in air traffic control. --Predict and resolve aircraft conflicts and explain results of mathematical calculations and simulations.
(B) estimate and find solutions to application problems involving proportional relationships such as similarity, scaling, unit costs, and related measurement units.	--Use an interactive simulator plus calculation worksheets to apply proportional reasoning to identify and resolve distance, rate, time conflicts in air traffic control. --Predict and resolve aircraft conflicts and explain results of mathematical calculations and simulations.

(9) Measurement. The student solves application problems involving estimation and measurement.

Knowledge and Skills and Performance Descriptions	***LineUp With Math™* Activities**
The student is expected to estimate measurements and solve application problems involving length (including perimeter and circumference), area, and volume.	--Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios. --Predict and resolve aircraft conflicts and explain results of mathematical calculations and simulations.

(13) Underlying processes and mathematical tools. The student applies Grade 7 mathematics to solve problems connected to everyday experiences, investigations in other disciplines, and activities in and outside of school. The student is expected to:	
Knowledge and Skills and Performance Descriptions (A) identify and apply mathematics to everyday experiences, to activities in and outside of school, with other disciplines, and with other mathematical topics;	***LineUp With Math™* Activities** --Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios.
(B) use a problem-solving model that incorporates understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness;	--Use an interactive simulator plus calculation worksheets to model and resolve air traffic control conflicts. --Explore and apply a variety of strategies to optimize the solution of air traffic control conflicts.
(C) select or develop an appropriate problem-solving strategy from a variety of different types, including drawing a picture, looking for a pattern, systematic guessing and checking, acting it out, making a table, working a simpler problem, or working backwards to solve a problem;	--Use an interactive simulator plus calculation worksheets to model and resolve air traffic control conflicts. --Choose and apply a variety of strategies to optimize the solution of air traffic control conflicts.
(D) select tools such as real objects, manipulatives, paper/pencil, and technology or techniques such as mental math, estimation, and number sense to solve problems.	--Use an interactive simulator plus calculation worksheets to model and resolve air traffic control conflicts. --Choose and apply a variety of strategies to optimize the solution of air traffic control conflicts.
(14) Underlying processes and mathematical tools. The student communicates about Grade 7 mathematics through informal and mathematical language, representations, and models. The student is expected to:	
Knowledge and Skills and Performance Descriptions (A) communicate mathematical ideas using language, efficient tools, appropriate units, and graphical, numerical, physical, or algebraic mathematical models;	***LineUp With Math™* Activities** --Use an interactive simulator plus calculation worksheets to model and resolve air traffic control conflicts. --Predict and resolve aircraft conflicts and explain results of mathematical calculations and simulations.